ABSTRACT OF THE DISCLOSURE

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A method for mapping higher brain function comprises an fMRI mapping step S1 to map a brain function of the subject TP by fMRI, a head portion structural image acquisition step S3 to acquire a head portion structural image <u>IMGs</u> by an MRI system in a state that a headgear HC having a marker is mounted on the head portion of the subject \underline{TP} , a threedimensional image combining step S4 to create a threedimensionally combined image <u>IMGfs</u> by combining the head portion structural image <u>IMGs</u> and the brain functional image IMGf obtained by the fMRI mapping step S1, an optical probe mounting step S5 to specify positions on the headgear \underline{HC} where optical probes PR1, PR2 are mounted based on the three-dimensionally combined image <u>IMGfs</u> and to mount the optical probes PR1, PR2 at the specified positions and an NIRS measuring step S6 to conduct the NIRS by a NIRS method in a state that the headgear HC loaded with the optical probes PR1, PR2 is mounted on the head portion of the subject TP.